

***Technical Advisory Panel on Uniform National Rules
for NAEP Testing of Students with Disabilities***

Report to the National Assessment Governing Board

July 22, 2009

Chair: Alexa Posny

***Members: Louis Danielson, George Engelhard,
Miriam Freedman, Claire Greer, Robert Linn,
Debra Paulson, and Martha Thurlow***

Technical Advisory Panel on Uniform National Rules for NAEP Testing of Students with Disabilities

Executive Summary of Report to NAGB - July 2009

Chair: Alexa Posny

*Members: Louis Danielson, George Engelhard, Miriam Freedman, Claire Greer,
Robert Linn, Debra Paulson, and Martha Thurlow*

The panel believes the National Assessment of Educational Progress (NAEP) is an important tool for understanding academic achievement among students with disabilities. To ensure that NAEP samples are fully representative and to maintain the comparability of state and district NAEP results, the panel recommends that NAEP

1. Encourage as many students as possible to participate in NAEP, and provide for the use of allowable accommodations that are necessary to enable students with disabilities to participate.
2. Clarify and expand NAEP's guidance to schools, encouraging maximum participation of students with disabilities so at least 95% of those drawn for the NAEP sample participate.
3. Report separately on students who have individualized education programs (IEPs) and those with Section 504 plans, but (except to maintain trend) only count the students with IEPs as students with disabilities.
4. Provide incentives for schools to include students with disabilities, including additional outreach and public reporting of participation rates below 95% of students with disabilities.
5. Support research efforts to develop targeted testing for students at both the top and bottom levels of achievement, with sound procedures to identify students to receive targeted test booklets on the basis of their performance on some standard indicator of achievement.
6. Encourage and review research on the identification and progress of students who have a significant cognitive disability but in the short term do not test this 1% of students on NAEP.
7. Assess the English language proficiency of students with disabilities who are English language learners and are drawn for the NAEP sample and provide linguistically appropriate accommodations for those who need them before determining whether additional accommodations may be needed to address any disabilities those students may have.

Although NAEP can establish rules for students to be tested in the same way, individual students participate in NAEP on a voluntary basis, and it is their schools that normally make the decision about whether a student drawn for the NAEP sample participates or not. Therefore, the cooperation of schools and parents is essential to ensure that NAEP samples in every jurisdiction are fully representative and that test results are comparable among the states and districts assessed. The recommendations in this report are intended to be of practical use in determining NAEP testing procedures and in working with states and districts to continue the assessment's tradition of producing comparable results and useful information.

Technical Advisory Panel on Uniform National Rules for NAEP Testing of Students with Disabilities

Report to National Assessment Governing Board

July 22, 2009

Chair: Alexa Posny

*Members: Louis Danielson, George Engelhard, Miriam Freedman, Claire Greer,
Robert Linn, Debra Paulson, and Martha Thurlow*

BACKGROUND AND INTRODUCTION

The National Assessment of Educational Progress (NAEP) was established in 1969 to measure the academic achievement of a representative sample of elementary and secondary students in the United States. It is sometimes called the Nation's Report Card. Subsequently, the assessment was expanded to provide representative-sample results for states and large urban school districts.

NAEP is designed to produce valid, comparable data on large groups of students. It is prohibited by law from providing results for individual children or schools. Scores are not intended and (because no student takes the entire test) cannot be calculated for individual students. Because NAEP measures change over time, it can provide participating states and districts with reliable, independent information about the success of their efforts to improve education. It is an important common measure of student performance.

Recently, concern has arisen about the wide variation among states and districts in the rates at which students with disabilities participate in NAEP. Confusion can arise when in some states almost all students with disabilities who are selected for the NAEP sample take the test, and in others many do not. Some advocates for students with disabilities believe that having good information on the achievement of the full population of students with disabilities is a critical tool in improving services for them. The purpose of this report is both to increase the uniformity of NAEP participation rates among states and districts and to make participation rates high and participation procedures uniform.

Specifically, the National Assessment Governing Board (NAGB) convened a technical advisory panel to recommend a uniform set of rules for testing students with a disability on NAEP. The eight-member group held an all-day meeting in Washington, DC, on April 23, 2009, for initial briefings and discussion. The panel conducted four conference calls and exchanged numerous drafts and e-mails between May and July.

The Governing Board charged the panel to make recommendations that:

- provide that students with similar disabilities be tested on NAEP the same way, regardless of where they live;
- maximize student access and meaningful participation;
- ensure that the constructs on NAEP frameworks be measured and that all students may be placed on the same scale;
- permit only accommodations that maintain the validity, reliability, and comparability of NAEP results; and
- are feasible, logistically and financially, and without detrimental consequences.

RECOMMENDATIONS

1. Encourage as many students as possible to participate in NAEP, and provide for the use of allowable accommodations that are necessary to enable students with disabilities to participate.

The panel recommends that all students with disabilities participate in NAEP with appropriate accommodations that they need, which are approved by NAEP. The panel understands that some students will not be allowed to use on NAEP some of the accommodations or modifications that are permitted on tests administered by the state or district.

The panel defines an appropriate accommodation as:

- a change to the way NAEP is normally administered, and
- a change that does *not* alter the construct being measured, and
- a change that is needed to enable a student to take the test.

If a proposed accommodation alters the construct being measured, the panel considers it a modification. The panel defines a modification as:

- a change to the way NAEP is normally administered, and
- a change that does alter the construct being measured.

The panel recommends *against* the use of any change that would alter the construct NAEP is designed to measure, as defined by the NAEP frameworks.

The panel understands that the Governing Board defines the construct underlying the NAEP reading test as “an active and complex process that involves understanding written text.” Because the Governing Board defines this construct to include the ability to decode written text, the panel reaffirms the current NAEP practice of not allowing “read aloud” as an accommodation on the reading test.

The panel understands that the Governing Board defines the construct underlying the NAEP mathematics test as involving five elements, one of which is “Number Properties and Operations (including computation...)” Because this construct includes computation, the panel reaffirms current NAEP practice of not allowing the use of calculators on those parts of the NAEP math test that assess computation.

2. Clarify and expand NAEP’s guidance to schools, encouraging maximum participation of students with disabilities.

As stated previously, the panel recognizes that the testing rules NAEP adopts will not yield comparable state and local results if jurisdictions vary in their participation practices. The panel therefore recommends changes to the guidance given school personnel in deciding whether students drawn for the NAEP sample are to be tested. The panel recommends advising schools on the purpose and nature of NAEP and the desirability of high participation rates, and setting the clear expectation that at least 95% of all students with disabilities drawn for the NAEP sample are expected to take the test.

In a departure from past guidance, the panel recommends state and local decision makers begin with the expectation that almost all students with disabilities will take the test, and then make decisions regarding the accommodations that individual students will be allowed to have. Specifically, the panel recommends this revised Decision Tree be provided to schools:

NAEP Decision Tree for Students with Disabilities

BACKGROUND CONTEXT

1. NAEP is designed to measure constructs carefully defined by frameworks adopted by the Governing Board. Those frameworks include a definition of reading as “an active and complex process that involves understanding written text,” (including the ability to decode text) and include in its definition of mathematics five elements, one of which is “Number Properties and Operations (including computation...).”
2. NAEP provides a list of accommodations that are and are not allowed in reading, mathematics, and other subjects. [See Column B of appendix for accommodations allowed and not allowed on NAEP.]

STEPS OF THE DECISION TREE

3. In deciding how this student will participate in NAEP:
 - a. If the student has an IEP or 504 plan and is tested without accommodation, then he or she takes NAEP without accommodation.
 - b. If the student’s IEP or 504 plan specifies an accommodation permitted by NAEP, then the student takes NAEP with that accommodation.
 - c. If the student’s IEP or 504 plan specifies an accommodation or modification not allowed on NAEP, then the student takes NAEP without that accommodation or modification.

Students should be *excluded* from participating in NAEP *only* if they have previously been identified in an IEP as having a significant cognitive disability, and are assessed by the state on an alternate assessment based on alternate achievement standards (AA-AAS). Students should be *included* if tested on an alternate test with what is called modified achievement standards (AA-MAS).

The panel recommends that guidance to school decision-makers include:

- i) a short, clear account of the purpose and value of NAEP, why the inclusion of virtually all selected students is needed to provide representative samples, and the steps to determine how a selected student should participate, and
- ii) the target for the percentage of students appropriately to be excluded from participating in NAEP would be 1% of the sample.

The panel also recommends that a broader effort at public information be undertaken to explain the value of NAEP and of securing high participation rates in the assessment.

3. Report separately on NAEP results for IEP and 504 students.

The panel recommends that NAEP report results for both IEP and 504 student groups, but report them separately, and calculate state scores for students with disabilities using IEP results only. At present the National Assessment reports on students with disabilities by combining the results for students with an individualized education program (who receive special education services under the Individuals with Disabilities Education Act [IDEA]) and those with Section 504 plans under the Rehabilitation Act of 1973 (a much smaller group who are not special education students but may be allowed test accommodations).

Under the Elementary and Secondary Education Act, only students with an IEP are counted as students with disabilities in reporting state test results. NAEP should be consistent with this practice. However, the panel recognizes the usefulness of maintaining NAEP trends, and therefore recommends reporting both sets of data and combining results for IEP and 504 students only to preserve the trend line. The panel recommends over time defining students with disabilities for NAEP as only those who have an IEP. All 504 students should participate in NAEP.

4. Provide incentives for schools to include students with disabilities.

The panel recommends that NAEP make enhanced efforts to provide a short clear description of the purpose and value of NAEP and of full student participation in the assessment. These materials should be aimed at school personnel, state officials and the general public, including the parents of students with disabilities.

The panel recommends that upon release of each new set of NAEP results, information indicating the states and districts with more or less than 95% participation rates of students with disabilities with IEPs be among the information bullets highlighted for the

public and the press. All students with 504 plans are expected to participate. Participation rates should be reported both as a percentage of the total sample and as a percentage of the students identified with disabilities within the sample.

The panel further recommends undertaking special studies to look at any outlier states, with unusually high or low exclusion rates, and to continue work previously done for NCES to probe whether there is a cut point beyond which exclusion rates appear suspect.

Some members of the panel noted that there is significant variation among the states in the rate at which they identify students with disabilities for IEPs. While on average states identify about 12-13% of their students as having a disability and needing special education services, some states identify only 9% of their students, and others identify twice that percentage. The differences result mostly from state and local policy rather than the incidence of disability itself. Generally, jurisdictions with high identification rates include more students with mild disabilities. Those with low identification rates include only the more severe, which would make it more difficult to achieve 95% SD participation even though, overall, more of their students may be taking the assessment.

As an alternative to the 95% participation guideline for students with disabilities, some members of the panel recommend that NAEP study the possibility of developing a uniform SD participation guideline based on a percentage of the total student population, regardless of the percent identified as SD. If more than the selected percentage were excluded on the basis of disability, that would be noted in NAEP reports as indicating that the sample was not fully representative. For example, a maximum of 0.6% of the total sample not tested, or 99.4% participating, would correspond to a SD participation rate of 95% where 12% of the sample is identified as having a disability.

5. Support research efforts to develop targeted testing for all students at both the top and bottom levels of achievement, with sound procedures to identify students to receive targeted test booklets on the basis of their performance on some standard indicator of achievement.

The panel recommends that research and development efforts be pursued for NAEP to test all students, not only students with disabilities, at the top and bottom levels of achievement on targeted booklets with a high concentration of difficult or easy items that can be placed on the existing NAEP scale.

Currently all students are tested by NAEP with two 25-minute blocks of items covering a broad range of difficulty, some easy, some difficult, many in the middle. Any student might be randomly assigned any of the various booklets covering the complete range of difficulty for the grade and subject in which he or she is being tested.

The National Center for Education Statistics (NCES) is now developing booklets with a concentration of existing easy items that could be targeted for low-performing students. The panel recommends building upon this research effort, if successful, to create targeted tests at *both* the top and bottom of the achievement spectrum. High-performing students, those doing work well above grade level, would encounter more challenging items that

allow them to demonstrate knowledge at the advanced level. Likewise, low-performing students would encounter more items that allow them to demonstrate knowledge at the below basic level. This would allow NAEP to measure and report more accurately and in greater detail the knowledge and skills of those students scoring below basic and those scoring advanced. At both ends of the continuum, standard errors would be reduced, and better information would be available about student performance and improvements over time. If needed, additional easy and difficult items should be developed that test NAEP constructs on the existing NAEP scale.

The panel recommends that NAGB attend closely to NCES' on-going research in this area, and base future decisions on this work and similar research by others. If targeted testing becomes part of future NAEP operations, this information should be described carefully for state and local decision makers. Efforts should be made to explain how these innovations enable students with disabilities who are studying at below basic levels and those who are studying at advanced/above grade levels to engage with NAEP at all points of the continuum of achievement.

The panel recommends that NAEP find an objective and psychometrically sound method to identify which students take any targeted tests that are developed. It recommends consideration of the following possibilities:

a) a universal 2-stage process, the system proposed by R. Darrell Bock, in which all students receive a comprehensive block first (a locator test), and then receive either a booklet with a concentration of easy items, a test with a concentration of difficult items, or the usual full-range test in the second block, depending upon their performance on the initial locator test.

While this option was the preference of many panel members, it entails major issues of test administration that need to be taken into account before the technique would become feasible.

b) a specially constructed new NAEP screener.

This would entail new development work.

c) student performance near the top or bottom percentile rank of the state's previously administered state assessment.

While several panel members were hesitant to use results of varying state assessments, existing research shows that even the widely different tests used by states produce scores that correlate well enough with NAEP to be useful in identifying top and bottom performers who would be assigned high or low blocks of items.

d) a new or different method that may emerge, which is psychometrically sound and easy to administer.

The panel wants to see the adoption of a method that is fair, feasible, objective and effective, but recognizes that considerable technical development would be required before targeted testing can become a regular part of NAEP.

The panel recommends that the assignment of a targeted test to a student be based on how the student performs on some standard indicator of achievement (such as a test), and NOT upon a student's label, such as having a disability or being in advanced placement classes. The panel intends that the availability of the easy form of the test assure participating schools that low-performing students, including students with disabilities, are able to participate without altering NAEP standards. Likewise, high-performing students could be challenged on items in the assessment at the greater level of difficulty.

6. Encourage and review research on the identification and progress of students who have a significant cognitive disability but in the short term do not test this 1% of students on NAEP.

The Panel recommends that NAGB form a panel of experts and stakeholders to review research and best current practices for identifying, measuring and reporting the progress of students who have a significant cognitive disability, and to make recommendations to NAGB for how emerging findings can and should be applied to NAEP in the future so such students could be included in NAEP.

The panel believes that NAEP should encourage the appropriate assessment of all children, but recommends that for the near future students with a severe cognitive disability—about 1% of the student population—be excluded from NAEP. The exclusion of these students should not be considered in determining whether a jurisdiction meets participation rate guidelines.

7. Assess the English language proficiency of students with disabilities drawn for the NAEP sample and provide NAEP-approved, linguistically appropriate accommodations for them before determining whether additional accommodations may be needed to address any disabilities these students may have.

Some students drawn for the NAEP sample will be both English language learners and students with disabilities. For these students it is important first to determine the level of their English proficiency, and the accommodations allowed for them on NAEP. If these students have also been identified as having a disability and are eligible to receive special education services, they should receive whatever accommodations are allowed by NAEP that they need to participate in the NAEP assessment.

APPENDIX A



LIST OF MEMBERS AND AFFILIATIONS

Technical Advisory Panel on Uniform National Rules for NAEP Testing of Students with Disabilities

- Alexa Posny, Kansas Commissioner of Education (Chair)
Former Director, Office of Special Education Programs
U.S. Department of Education
- George Engelhard, Jr.
Professor of Educational Studies (Educational Measurement and Policy)
Emory University, Atlanta, GA
- Louis Danielson, Managing Director, American Institutes for Research
Former Director, Research to Practice Division, Office of Special Education
Programs, U.S. Department of Education
- Miriam Freedman, attorney and author
Stoneman, Chandler & Miller, Boston, MA
- Claire Greer, Consultant for Autism, Severe, and Multiple Disabilities
Exceptional Children Division
North Carolina Department of Public Instruction
- Robert Linn, Professor of Education (Emeritus)
Research and Evaluation Methods Program
University of Colorado
- Debra Paulson
Middle school math and special education teacher
El Paso, TX.
- Martha Thurlow, Director
National Center on Educational Outcomes
University of Minnesota

APPENDIX B

ACCOMMODATIONS ALLOWED ON NAEP

On state assessment this student:	COLUMN A	COLUMN B Accommodations allowed on NAEP			
		Reading	Math	Science	U.S. history or geography or civics
Presentation Format					
Has directions read aloud/repeated in English or receives assistance to understand directions	<input type="radio"/>	Standard NAEP practice			
Has directions only signed	<input type="radio"/>	Y	Y	Y	Y
Has test items signed	<input type="radio"/>	N	Y	Y	Y
Has occasional words or phrases read aloud	<input type="radio"/>	N	Y	Y	Y
Has all or most of the test materials read aloud	<input type="radio"/>	N	Y	Y	Y
Uses a Braille version of the test	<input type="radio"/>	Y	Y	Y*	Y*
Uses a large print version of the test	<input type="radio"/>	Y	Y	Y*	Y
Uses magnifying equipment	<input type="radio"/>	Y	Y	Y*	Y
Response Format					
Responds in sign language	<input type="radio"/>	Y	Y	Y	Y
Uses a Braille typewriter to respond	<input type="radio"/>	Y	Y	Y	Y
Points to answers or responds orally to a scribe	<input type="radio"/>	Y	Y	Y	Y
Tape records answers	<input type="radio"/>	N	N	N	N
Uses a computer or typewriter to respond	<input type="radio"/>	Y	Y	Y	Y
		Spelling/grammar check not allowed			
Uses a template to respond	<input type="radio"/>	Y	Y	Y	Y
Uses a large marking pen or special writing tool	<input type="radio"/>	Y	Y	Y	Y
Writes directly in the test booklet	<input type="radio"/>	Standard NAEP practice			
Setting Format					
Takes the test in a small group ²	<input type="radio"/>	Y	Y	Y	Y
Takes the test one-on-one ²	<input type="radio"/>	Y	Y	Y	Y
Takes the test in a study carrel	<input type="radio"/>	Y	Y	Y	Y
Receives preferential seating, special lighting, or furniture	<input type="radio"/>	Y	Y	Y	Y
Must have test administered by familiar person	<input type="radio"/>	Y	Y	Y	Y
Timing Accommodations (Note: NAEP takes only 90 minutes.)					
Receives extended time ⁴	<input type="radio"/>	Y	Y	Y	Y
Is given breaks during the test	<input type="radio"/>	Y	Y	Y	Y
Must be allowed to take subject test over several days	<input type="radio"/>	N	N	N	N
Other Accommodations					
Uses a calculator, including talking or Braille calculator for computation tasks	<input type="radio"/>	NA	N*	NA	NA
Uses an abacus, arithmetic tables, graph paper	<input type="radio"/>	NA	N	NA	NA
Uses dictionary, thesaurus, or spelling/grammar-checking software or devices	<input type="radio"/>	N	N	N	N
Receives the following accommodation(s) not listed above.	<input type="radio"/>	Check with your NAEP representative			